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REPORT ON PARA MEDICAL CURRICULA AT LOS ANAGELES CITY COLLEGE.

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AT THE TIME OF THIS REPORT, LOS ANGELES CITY COLLEGE OFFERED PROGRAMS LEADING TO EMPLOYMENT IN 13 HEALTH RELATED AND PARAMEDICAL OCCUPATIONS. REVIEW OF THESE PROGRAMS AND RELEVANT LITERATURE LED TO NINE RECOMMENDATIONS FOR INCREASING THE EFFECTIVENESS OF THE PROGRAMS--(1) CONSTRUCTION OF A SPECIAL FACILITY FOR ALLIED HEALTH SERVICES EDUCATION, (2) DEVELOPMENT OF A CORE PROGRAM OF ALLIED HEALTH SERVICES EDUCATION, (3) CHANGES IN THE POSITION OF CURRICULUM COORDINATOR TO FACILITATE PROGRAM DEVELOPMENT, (4) AS AN INTERIM MEASURE, PROCESSING OF FEDERAL AID REQUESTS BY INDIVIDUAL DEPARTMENTS AND FACULTY MEMBERS, (5) CONTINUATION OF EFFORTS TOWARD A DENTAL HYGIENCE PROGRAM, (6) ESTABLISHMENT OF A HOME HEALTH AIDE PROGRAM, (7) STUDY OF POSSIBILITY OF A 2-YEAR MENTAL HEALTH WORKERS CURRICULUM, (8) CONTINUED INVOLVEMENT IN THE "NEW CAREERS" PROGRAM TO AID IN UPWARD MOBILITY OF POTENTIAL HEALTH WORKERS, AND (9) IMMEDIATE ESTABLISHMENT OF AN OCCUPATIONAL THERAPY ASSISTING PROGRAM. A BIBLIOGRAPHY IS APPENDED. (WO)

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LOS ANGELES CITY COLLEGE

REPORT ON PARA MEDICAL CURRICULA

at

LOS ANGELES CITY COLLEGE

Research Study #68-4

UNIVERSITY OF CALIF.
LOS ANGELES

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INFORMATION

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January 26, 1968
Office of Research

JC 680 160

PREFACE

My appreciation goes to the members of the Para-Medical committee for their assistance in the gathering of information and for their suggestions during the course of this investigation.

Dr. John Archer	Miss Gertrude Pearson
Miss Helen Constable	Dr. Max Sheanin
Dr. Leigh Dodson	Dr. Ruth Stein
Mr. Eugene Hess	Mrs. Pauline Schatz
Mr. Robert Lyon	Mrs. Fay Wilson

Other suggestions and comments came from many of the faculty and administration.

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"Health care of the highest quality for all who need it is a goal that cannot be realized in any community where there are serious shortages of medical and paramedical personnel. The existence of such shortages is a serious problem of our times. Many educators, hospital administrators, physicians and public administrators believe that a fragmented system of education in the paramedical fields is to some extent responsible for this situation. They point to the difficulties experienced in recruiting qualified students, the high drop-out rate (one-third to two -thirds of those who enroll), the high cost of instruction due to small classes and limited use of expensive equipment, lack of enough qualified faculty, and the frustrating discrepancies that occur between training programs and job requirements."[1]

"The lone practitioner of medicine is an anachronism, as in his counterpart in other professions. The knowledge explosion has overwhelmed the professional and escalated his responsibilities. Increasingly he analyzes, plans, and administers services which are provided by others--others to whom he delegates in large measure routines carried out under his direction. The "others" are technicians and assistants. In medicine and dentistry, the list of supporting technicians is long. Some of the names are well known--such as medical laboratory technicians, x-ray technicians, opticians, inhalation therapy technicians, and dental hygientists. Others, many others, are doing the work, but their role as medical and dental assistants is less well developed. For some we even lack names. They not only assist the physician and the dentist, but, in this expanding field of knowledge and service, there is need for technical assistance for the professional nurse, the physical and occupational therapist, the medical record librarian, the dietitian, and many others."[2]

These two statements present some of the background for the present study. We are in the midst of expanding our concept of the basic amount of medical and dental care. Evident in these statements is the significant need for both larger numbers of trained individuals and individuals with a greater range of skills. Both of these needs have combined to press for the development of persons who are deeply skilled in a very specific area. In addition to the greater degree of specialization we see the fields opening to persons of intermediate status, that do not require the bacalaureate degree. Using these ideas as a central point we proceeded to study the existing programs at Los Angeles City College, Los Angeles Junior Colleges and other colleges and districts in California. We also explored the need for expansion of the present curricula and will make specific recommendations at the end of the report.

Twenty Para-medical classifications were studied by Fullerton including those which were presently being offered in the Metropolitan Phoenix, Arizona area or those which appeared to have a need for presentation in the near future. These are listed along with the disposition relative to the Los Angeles Junior College District (1967-68).[3]

PARA-MEDICAL CURRICULA

1.	3 year R.N.	Hospital affiliation with various J.C.'s
2.	2 year R.N.	LACC, LAVC, ELAC, LAHC
3.	L.P.N. (L.V.N.)	ELAC, LATT, LAVC
4.	Nurse Aide	Nursing Home Ass't. (geriatrics) LATT
5.	Dental Assistant	LACC
6.	Medical Technologist	California Licensed Clinical Lab. Tech. requires B.A. plus 1 year of intrnship
7.	Medical Secretary	LACC
8.	Radiologic Technologist	LACC
9.	Dental Hygienist	Under study LACC
10.	Dental Technician	LACC
11.	Physical Therapist	Graduate curricula
12.	Physical Therapist Ass't.	Under study LACC
13.	Occupational Therapist	Degree program B.A.
14.	Occupational Therapy Ass't.	Under study LACC
15.	Inhalation Therapy	ELAC started 9/67
16.	Medical Assistant	LACC, ELAC
17.	Laboratory Ass't.	Calif. legislation will not allow this
18.	Medical Record Librarian	B.A. program, some three year programs exist
19.	Medical Record Tech.	ELAC
20.	Radioisotope Technician	LACC

In comparing the American Association of Junior Colleges' list of "Health related and Para-medical Occupational Education Programs now being offered in community Junior Colleges," with the Fullerton list of twenty curriculums, it appears that many of the titles in the AAJC list are duplicated and that a more accurate number of programs would be about thirty. Some of the titles appear quite restrictive, EKG Technician for example. It is questionable whether the need for technicians in a category this specific would be large enough to justify a curriculum, although the University of Iowa is now offering a one-year program under this title.

The Health Careers Guidebook, 1966, of the United States Department of Labor lists over 200 fields ranging from anethesiology to x-ray technology. Many of these fields require training or education beyond the AA degree but a large proportion of them can be obtained at the Junior College level. The American Association of Junior College lists 42 programs that are appropriate for Junior College offering.

HEALTH RELATED AND PARA-MEDICAL OCCUPATIONAL EDUCATION PROGRAMS NOW BEING OFFERED IN COMMUNITY JUNIOR COLLEGES [4]

	LACC Offering			
	Present	Proposed	Future	Other
Medical Artist and Illustrator	Yes			
Occupational Therapy Technician		x		and SW
Medical Record Librarian Technician				ELAC
Medical Secretary	Yes			
Ward Clerk			?	
Medical Assistant	Yes			
Medical Engineer Technician		under study		
Dietetics Aide	Yes?.....			Food Service
Hospital Engineer Technician				?
Manual Arts Therapy Technician				?
Prosthetic Technician				Cerritos/SW?
Statistical Clerk				?
Corrective Therapy Aide				?
Recreation Therapy Aide	Yes			
Sanitation Technician				No
Blood Bank Technologist				No
Certified Laboratory Assistant	Not in California - illegal			
Dental Assistant	Yes			
Dental Hygienist		Exploring possibility		
Dental Laboratory Technician	Yes			
Electrocardiograph Technician				No
Electroencephalograph Technician				No
Hospital or Clinic Electronics Technician		Under study		
Food Technologist	Yes			
Histologic Technician				No
Inhalation Therapist				ELAC
Medical Technology Assistant				?
Practical Nurse	No	Other colleges in district		
Associate Degree (Registered)Nurse	Yes			
Radiologic Technician	Yes			
Optical Technician	Yes			
Psychatric Technician		Under study		
Radioisotope Technician	Yes			
X-Ray Technician	Yes			
Biomedical Electronics Technician		Under study		
Director of Hospital Volunteer Services				No
Operating Room Technician				TT
Ophthalmic Dispenser	Yes			
Environmental Health Technician				No
Medical Laboratory Assistant	CLA not in California			
Physical Therapy Assistant		Exploring possibility		

"The 'allied' health occupations include a broad range--perhaps every group beyond medicine and dentistry. We often speak of professional and technical fields, but the terms tend to defy definition. A professional is presumably educated to develop a high degree of professional judgment, and insofar as possible he should use that capability at the level of diagnosis, planning, supervising, and teaching, as well as at a specialist level. By the same token, the professional person should not have his time encumbered with repetitive tasks which require less than his best talents. This is true for the sake of society, which has many unmet needs that can only be filled by highly-prepared persons. But it is also true for the sake of the professional who needs the challenge of tasks and opportunities that require his special talents. Thus we need not only more professional people, but more and new kinds of technicians and assistants as well."[5]

The increased need for Allied Health workers, and even the basic concept of these workers comes as a result of much of the recent legislation at the State and Federal level. In addition to these sources the wide increase in the standard of living leads people to expect more and more services in all fields. Worker demands in the form of fringe benefits have also brought a large segment of the population to expect that adequate health service will be provided either by his employer or by the government.

"Needs for health services are great, demands are increasing, and the shortage of health manpower is a critical factor in our ability to meet health service needs.

There were 2.8 million persons in health occupations in 1966. This number will probably increase to 3.8 million persons by 1975. The expected in population, especially in the older years, will require over increasing numbers of health personnel to provide adequate health services.

An indication of the magnitude of the present shortage of health personnel can be obtained from recent surveys of hospitals and nursing homes. The returns show over 300,000 additional health workers are needed to provide optimum patient care.

Specific indications of needs are found in studies made in a number of States. Testimony in support of the Allied Health Professions Personnel Training Act of 1966 showed the existence of shortages of medical record librarians, dental hygienists, medical technologists, occupational therapists, physical therapists, and radiologic technologists."[6]

General proposals for the area of Allied Health Curricula at Los Angeles City College:

1. That each existing department continue their present processes of evaluating the value of the program and the instructional methods being used.
2. That areas of innovation be specified and implemented as District and/or Federal Assistance funds become available.
3. That the future needs of the individual programs be determined and appropriate steps be taken to meet the needs; for example, the nursing program expanded this year to 100 students to help meet the shortage of registered nurses.
4. That a continued interest on the part of the administration create an atmosphere that will allow for the growth of individual programs as well as the additions of new programs as they are deemed necessary.

RECOMMENDATION #1: THAT WE PURSUE THE POSSIBILITY OF AN ALLIED HEALTH BUILDING

Many colleges and universities are forming groups of Allied Health Science curricula and placing them in one building so that individuals who will be able to train together and have a greater understanding and insite into the problems that are common to all.

El Camino College is planning a new building to be called the Allied Health or Para-Medical building and move the existing programs into the building. In addition to those programs that they presently offer they are working toward a wider offering. Groups of the interested faculty are studying curricula of other colleges and hope to expand to include Radiologic Technology (X-ray) and other of the Dental Auxillary fields, such as Dental Technology and Dental Hygiene.

It would be hard to estimate the amount of money needed for such a structure but keeping in mind the cost of the new library addition and the proposed cost of the speech and broadcasting building (each at about $1 million) certainly the cost would be between 1 and 2 million. The Dental Hygiene Program costs alone are $100,000 but much of this includes the staff and some of the supplies. By including in-contract much of the necessary equipment along with some up-to-date and innovational instructional services, costs could quickly reach the higher estimate. With the increased availability of Federal Money and the rate at which departments on the campus are getting grants it might appear that some Federal assistance could be obtained.

"A promising approach to education for the health professions at the baccalaureate and graduate level today is the grouping of a number of health curriculums in a college or school within a university medical center. In this approach the indivual curriculums gain status and strength. The programs which are inherently related are placed in an environment where constant interaction is possible. With the combining of several programs in a college or central unit, duplications in such areas as administration, faculty, and facilities can be minimized. More importantly, individuals who will later work together in the medical scene are prepared together. Communication with other health professionals, a critical factor in the provision of health services, is learned during their educational experience."[7]

"Foothill College, one of the four community colleges serving northern Santa Clara County, in California, offers six health science programs leading to the associate of arts degree. These programs were established and designed with the cooperation of an advisory group from the community to meet the specific

needs of county residents. The programs included in the curriculum are nursing, dental assisting, dental hygiene, inhalations therapy, medical assisting, and X-ray Technology. This course-work is supplemented by actual clinical experience. In the medical assisting and dental assisting programs, clinical experience is conducted in local medical clinics, and selected dental offices." [8]

"All programs require a core of general education courses on which technical courses build rather directly. Some courses cut across departmental lines and are intended for all persons engaged in work in the field. Laboratory hours, utilizing the clinical facilities of nearby hospitals and health agencies, are central to each of the programs. These students' clinical laboratory experiences utilizing pre- and post- discussion periods, are chosen, directed, and evaluated by instructors to exploit the individual learning possibilities to the utmost." [9]

RECOMMENDATIONS #2: THAT WE DEVELOP A CORE WHICH MIGHT BE CALLED, "HEALTH PROGRAM ORIENTATION OR ALLIED HEALTH ORIENTATION"

The need for such a course has many facets.

1. The students who come to us fresh from high school need to be directed toward the greatest utilization of the facilities on the campus.

2. Some new students may need a degree of remediation but not enough to place them in the Developmental Studies Program. They may not place below the 10th percentile but perhaps not much above it either.

3. Many of the students who would register for a course of program may not really know what they want and have only "heard about" a program that seems to appeal. Many of the first semester programs then begin with large numbers of students who are in essence, "shopping," and while there is nothing wrong with this it does tie up the lab facilities that might be better put to use with those students who are more certain about their goals. Many of the first semester students then fall by the way, dropping by the 5th week or being carried for a few more weeks and even perhaps to the end of the semester. By the end of the first semester the students enrolled in the programs may be down more than 50% (which may be a conservative estimate).

4. One aspect of these shopping students is that they may take the place of a person who has seriously decided on his major and prevent them from getting into the program.

The content of such a course that might meet only one hour per week would be built on much of the material that is presently being presented and is "taking away" from the intended course content. Introductory vocabulary could be presented which would borrow from all of the Health Sciences and thus introduce content and help both the student and the instructor identify needed areas of remediation.

Many of the resource personnel on the campus are already being used in existing duplicated courses. The librarian given an orientation to the library, someone in the counseling office discusses the use of counseling services, the medical office discusses health aspect on campus and needs for students in the field. The instructional Materials Laboratory could be introduced, the placement office, student activities office, all of these would allow the first semester student to become acquainted with the campus and even involve the student to a greater degree than is presently being done.

Examples of such courses are already given in the form of Biology 32 in the Life Sciences. In this class guest lecturers from on and off campus, speak to the class about a variety of subjects which are designed to open the eyes of the students and allow them to explore the many possibilities in the Allied Health Fields.

RADIOLOGIC TECHNOLOGY I is also an example of a one hour per week course in which essentially the same format is followed. The possibility of combining this course and others accomplish the desired end of informing the student about his immediate work on the campus, and his future in the professional world.

HOME ECONOMICS I is another example wherein resource people present the potential in the field.

One of the problems that might be encountered is: Could we get the various individuals now giving these classes to cooperate in giving a single combined course? How wide could this be? Would it include the nursing department? Would it need to be expanded to two meetings per week and give two units credit or is the one unit with only about 18 meeting sufficient?

Most of the instructors who would be involved feel that this could be a very good way of reaching more students and yet wish to keep their own part for themselves.

RECOMMENDATION #3: THAT THE POSITION OF COORDINATOR OF CURRICULUM DEVELOPMENT BE VARIED TO FIT THE PARAMETERS OF THE SPECIFIC ASSIGNMENT

In the previous assignment, Glenn James, the parameters seem to be rather straight, to establish a campus program for the utilization of the new IBM 360 Computer. It would also seem that succeeding assignments such as the English Department and the Secretarial Science Department would also have initial parameters that could be met in the one semester. The Para-Medical Assignment took so much time to define the problem and took into the feasibility of new curricular introductions that one semester quickly disappeared and some of the proposals are just beginning to come into view. In order to have continuity of program planning beyond that of the Dean of Instruction it would seem necessary to have some way of extending the assignment, possibly on a half time basis. Some of the college officials on other campuses who have been contacted about the time needed to prepare new programs speak in terms of years with about five years as a maximum.

Some programs are in the formative stage at the National Level and as the policy becomes available we will be contacted about establishing a curriculum. With the present assignment this means extra work when the time and proposals come together.

Part of the proposal for my semester's assignment was to look into the possibilities of Federal assistance for up-grading present curricula in the Allied Health Fields, to develop new offerings and to build or remodel adequate facilities for instructional purposes.

RECOMMENDATION #4: THAT UNTIL AN OVERALL PLAN OF PRESENTATION IS FORMED, THE INDIVIDUAL DEPARTMENT CHAIRMAN AND INTERESTED FACULTY CONTINUE TO APPLY FOR FEDERAL ASSISTANCE FOR THEIR INDIVIDUAL PROJECTS AS THEY ARE PRESENTLY DOING WITH SOME RATHER GOOD RESULTS

Specific projects in the Radiologic Technology and the Dental Assisting Technology Departments have had rewarding experience in applying and receiving grants for improvements under P.L. 89-751, The Allied Health Professions Personnel Training Act.

A general list of "Federal Legislation Affecting the Supply and Demand of Health Manpower," 1956-65 is printed as Appendix G in, "Training Health Service Workers: The Critical Challenge," 1966 published by the United States Department of Labor.

The following recommendation or statements are given with regard to specific programs.

RECOMMENDATION #5: DENTAL HYGIENE PROGRAM: THAT WE CONTINUE OUR INTEREST IN THIS PROGRAM, AND THAT WE CONTINUE IN OUR INTERESTED ASSOCIATION WITH THE LOCAL DENTAL SOCIETY

We might move toward the Dental Hygiene Association in order to understand their position in opposition to the 2 year program. Continue to receive information from the pensinsula Junior Colleges that have the program. Hope that the future of the Dental Association moves toward a Unified State Organization and that perhaps the University of California, in trying to set up a Supervisor of two year programs, might also be willing to add a program in the Los Angeles Junior College District. If it is merely a loose affiliation such as presently exist there should be no problem, other than the opposition of those forces in

the Los Angeles area. As long as the Directing Dentist and Dental Hygienists are approved by the sponsoring Dental School we would fulfill the legal specifications.

The possibility of completing the Dental Auxiliary field with the addition of this program is well on the way. Investigations have shown a significant need for the program but the procedures prevent our offering it without approval of the local Society of Dentists and a possible affiliation and sponsorship with an accredited Dental School. There is also vocal opposition to a two year program coming from the Dental Hygiene Association. Individual dentists are mixed in their feelings toward the two year program.

We have contacted both the local Dental Society and the Southern California Dental Association and have requested a position statement from the Los Angeles Dental Society Executive Committee. We are awaiting a formal reply from the Los Angeles Dental Society regarding their position on the two year program.

RECOMMENDATION #6: HOME HEALTH AIDE: THAT THE NURSING DEPARTMENT OFFER THEIR PROPOSED CURRICULUM FOR HOME HEALTH AIDE AS SOON AS POSSIBLE

RECOMMENDATION #7: MENTAL HEALTH WORKER: THAT DR. MAX SHEANIN OF THE PSYCHOLOGY DEPARTMENT CONTINUE TO STUDY THE POSSIBILITY OF OFFERING A TWO YEAR CURRICULUM FOR TRAINING MENTAL HEALTH WORKERS

Much of the preliminary work has already been done by Dr. Sheanin and more information is being gathered at this time. Based on the findings of a survey of job opportunities in the community we should be able to make some decision shortly after June 30, 1968.

RECOMMENDATION #8: NEW CAREERS PROGRAM: THAT THE COLLEGE CONTINUE TO WORK WITH EXISTING AGENCIES AT THE NATIONAL, STATE AND LOCAL LEVEL TO INVOLVE THE JUNIOR COLLEGES IN THE UPWARD MOBILITY CONCEPT WITH "NEW CAREERS."

We presently are in contact with the local Office of Economic Opportunity which is coordinating the program in Los Angeles.

RECOMMENDATION #9: OCCUPATIONAL THERAPY ASSISTING: THAT THE PROPOSED TWO YEAR CURRICULUM PRESENTLY BEING CONSIDERED BY THE DEAN OF INSTRUCTION AND THE REPRESENTATIVES OF THE OCCUPATIONAL THERAPY ASSOCIATION OF SOUTHERN CALIFORNIA BE IMPLEMENTED AT THE EARLIEST POSSIBLE DATE

The Dean of Instruction is presently interviewing individuals for the position as Chairman of the Program and would hope to offer the first courses in September, 1968.

STATEMENT #1

BIO-MEDICAL ENGINEERING TECHNICIAN:

This curriculum is currently being studied by the departments that would be involved. The program seems to combine the best parts of a concentrated electronics and electricity curriculum with the addition of basic Biology, Physiology, and Psychology. Additional information concerning the job specification and employment possibilities needs to be obtained before recommending that planning go any further. It might be possible to offer this program now by listing an option with the present Electronics Technology Curriculum.

STATEMENT #2

DENTAL ASSISTING:

Through the work of the Department and the Advisory committee, the curriculum is continually being updated. Discussions are in progress with the Veterans Administration about the possibility of expanding the number of students and facilities.

DENTAL TECHNOLOGY:

The additional laboratory facilities available with the completion of Bungalow 9 will enable this program to meet the need of the students presently enrolled. Expansion of the program might move toward Evening Division offerings.

STATEMENT #3

INDUSTRIAL LABORATORY ASSISTANT:

The department chairmen of Life Science, Chemistry, Physics, and Engineering are studying the possibility of putting together a curriculum based upon present offerings in the college. The job specifications are so broad that a package would have to be flexible enough to permit a student to specialize and yet have sufficient general content to make him capable.

MEDICAL LABORATORY ASSISTANT OR CERTIFIED LABORATORY ASSISTANT:

This two-year curriculum is currently being offered by many Junior Colleges throughout the United States. It is presently against the existing laws to offer such a program in California. In order to go any further with this program we would have to get a change in the law. The California Association ofClinical Laboratory Technologists are on record as being against the program and will resist legislation changes with all the forces available to them.

STATEMENT #4

OPTICIAN ASSISTANT:

Dr. Archer of the Ophthalmic Optics Department is developing a curriculum to train Optician Assistants. He is working directly with the Dean of Instruction and hopes to offer the program in the Fall semester, 1968.

STATEMENT #5

PHYSICAL THERAPY ASSISTANT

We have been in contact with representatives of the Southern Association of Physical Thearapist and will receive any information as it becomes available. The National Association is presently considering guidelines for the establishment of Junior College program in Physical Therapy Assistant. Recommend that we continue to communicate with the association. This curriculum would be a valuable addition to the present Para-Medical programs and would also work well with the curriculum in Occupational Therapy Assistant as they would both utilize many of the same core classes that already exist in the college.

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